

# Make Energy Clean Again





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### Part I: Overview of Business

Jasper County Conservation is an organization that works to acquire and develop county parks, preserves, forests, wildlife, and other conservation areas within Jasper County. It is their mission to establish and maintain quality parks, recreation areas and opportunities, conservation efforts, and outdoor education systems that provide service to the residents of Jasper County and the State of Iowa. Overall, Jasper County Conservation currently possesses and services 38 different areas, comprising 12,008 acres of Jasper County land that is dedicated to public use and enjoyment!

## Part II: Job Specifics

- Align current school programs and curriculum to Next Generation Science Standards
- Design new curriculum aligned to Next Generation Science Standards for middle school and high school
- Lead a "conservation crew" and prairie restoration projects
- Assist with summer camps
- Developed new summer programs

#### Part III: Introduce the Problem

- The way we are currently using energy, namely non-renewable resources, is polluting our environment.
- If we do not begin to monitor energy use more closely and find ways to use more clean energy sources we will be in an energy crisis.
- Our current reliance on non-renewable resources is not only harmful to the environment, but the pollution resulting from their use can lead to serious health problems. Also, at our current rate of use we may run out of these energy sources altogether as well as limit our access to some renewable energy sources.

## Part IV: Background

- Students will need to know the difference between non-renewable and renewable energy as well as different sources for each.
- Identify potential benefits and limitations of each type of energy source.
- Powering the Planet: Renewable Energy video from "Nature Works Everywhere"
- Analyze data on current energy consumption and major energy source(s).
- Analyze solar and wind maps of the United States to determine which energy sources would work best in certain areas.

#### **Part V: Business Solution**

- The business will educate the community on the negative impact using non-renewable energy sources has on the environment and their long-term effects.
- Educate the community on the power of renewable energy sources and their availability.

#### Part VI: Student Solutions

- Students will create a presentation to propose potential solutions to help end the energy crisis.
- Student solutions will focus on using clean/renewable energy sources and their long-term benefits.
- The type of energy source they propose to use will depend on the geographic location of implementation.